(19) World Intellectual Property Organization International Bureau



: 18 (18 1 | 18 1 | 18 1 | 18 1 | 18 1 | 18 1 | 18 1 | 18 1 | 18 1 | 18 1 | 18 1 | 18 1 | 18 1 | 18 1 | 18 1 |

(43) International Publication Date 1 February 2001 (01.02.2001)

(10) International Publication Number WO 01/07318 A1

B64C 25/68

English

(21) International Application Number: PCT/US00/20099

(22) International Filing Date: 24 July 2000 (24.07.2000)

(25) Filing Language: English

(26) Publication Language:

(51) International Patent Classification?

(30) Priority Data: 60/145,286

23 July 1999 (23.07.1999) US

(71) Applicant (for all designated States except US): AD-VANCED AEROSPACE TECHNOLOGIES, INC. [US/US]; 54 Roan Lane, St. Louis, MO 63124 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): MCDONNELL William, R. [US/US]; 54 Roan Lane, St. Louis, MO 63124 (US).

(74) Agent: ROBBINS, Glenn, K., II; Greensfelder, Hemker & Gale, P.C., 2000 Equitable Building, 10 S. Broadway, St. Louis, MO 63102-1774 (US).

(81) Designated States (national): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

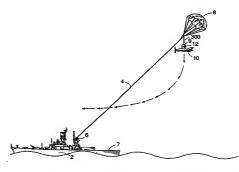
(84) Designated States (regional): ARIPO patent (GH. GM. KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:

With international search report.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: LAUNCH AND RECOVERY SYSTEM FOR UNMANNED AERIAL VEHICLES



(57) Abstract: An improved method of launching and retrieving a UAV (Unmanned Aerial Vehicle) (10) is disclosed. The preferred method of launch involves carrying the UAV (10) up to altitude using a parasail (8) similar to that used to carry tourists aloft. The UAV is dropped and picks up enough airspeed in the dive to perform a pull-up into level controlled flight. The preferred method of recovery is for the UAV to fly into and latch onto the parasail tow line (4) or cables hanging off the tow line and then be winched back down to the boat (2).